## WHAT IS CLAIMED IS:

- 1. A laminate for producing a paper package comprising: a paper substrate; and a five layer coextrusion coated onto the substrate, the five layer coextrusion comprising: a first layer of low density polyethylene, a first adhesive tie layer, a blend barrier layer made from ethylene vinyl alcohol copolymer and a polyolefin, a second adhesive tie layer, a second layer of low density polyethylene; wherein the blend barrier layer comprises 35%-95% ethylene vinyl alcohol copolymer.
- 2. The laminate for producing a paper package in accordance with claim 1, further comprising a polyolefin layer coated onto an uncoated side of the paper substrate.
- 3. The laminate for producing a paper package in accordance with claim 1, wherein the ethylene vinyl alcohol copolymer has an ethylene content ranging from 29-50%.
- 4. The laminate for producing a paper package in accordance with claim 1, wherein the ethylene vinyl alcohol copolymer has an ethylene content of 44%.
- 5. The laminate for producing a paper package in accordance with claim 1, wherein the polyolefin of the blend barrier layer is low density polyethylene, linear low density polyethylene or polypropylene.
- 6. The laminate for producing a paper package in accordance with claim 1, wherein the first and second adhesive tie layer is a modified polyethylene or modified polypropylene.
- 7. The laminate for producing a paper package in accordance with claim 1, wherein the substrate is paperboard.
- 8. The laminate for producing a paper package in accordance with claim 1, further comprising a layer of linear low

density polyethylene and a layer of low density polyethylene applied between the five layer coextrusion and the substrate.

- 9. The laminate for producing a paper package in accordance with claim 2, wherein the blend barrier layer comprises 50% ethyl vinyl alcohol copolymer with an ethylene content of 44 mole % and 50% low density polyethylene.
- 10. A package produced from a laminate comprising: a paper substrate; and a five layer coextrusion coated onto the substrate, the five layer coextrusion comprising: a first layer of low density polyethylene, a first adhesive tie layer, a blend barrier layer made from ethylene vinyl alcohol copolymer and a polyolefin, a second adhesive tie layer, a second layer of low density polyethylene; wherein the blend barrier layer comprises 35%-95% ethylene vinyl alcohol copolymer.
- 11. The package produced from a laminate in accordance with claim 10, further comprising a polyolefin layer coated onto an uncoated side of the paper substrate.
- 12. The package produced from a laminate in accordance with claim 10, wherein the ethylene vinyl alcohol copolymer has an ethylene content ranging from 29-50%.
- 13. The package produced from a laminate in accordance with claim 10, wherein the ethylene vinyl alcohol copolymer has an ethylene content of 44%.
- 14. The package produced from a laminate in accordance with claim 10, wherein the polyolefin of the blend barrier layer is low density polyethylene, linear low density polyethylene or polypropylene.
- 15. The package produced from a laminate in accordance with claim 10, wherein the first and second adhesive tie layer is a modified polyethylene or modified polypropylene.

- 16. The package produced from a laminate in accordance with claim 10, wherein the substrate is paperboard.
- 17. The package produced from a laminate in accordance with claim 10, further comprising a layer of linear low density polyethylene and a layer of low density polyethylene applied between the five layer coextrusion and the substrate.
- 18. The package produced from a laminate in accordance with claim 11, wherein the blend barrier layer comprises 50% ethyl vinyl alcohol copolymer with an ethylene content of 44 mole % and 50% low density polyethylene.